

Amendments to the Drawings

The Examiner has objected to the drawings. Accordingly, the attached sheet of drawings is a replacement sheet for Fig. 8. The label "CONVENTIONAL ART" has been added to Fig. 8.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

The Applicants thank the Examiner for the thorough consideration given the present application. Claims 1-17 are pending in the present application, and claims 1-7, 9, 11-17 have been amended. Claims 8 and 10 have been canceled. The Examiner is respectfully requested to reconsider the rejections of claims 1-7, 9, 11-17 in view of the amendments to the claims and the remarks as set forth below.

Claim for Priority

It is gratefully acknowledged that the Examiner has recognized the Applicants' claim for foreign priority based upon an international application designating the United States. In view of the fact that Applicants' claim for priority has been acknowledged, no additional action is required from the Applicants at this time.

Acknowledgment of Information Disclosure Statement

The Examiner has acknowledged the Information Disclosure Statement filed on March 28, 2002. An Initialed copy of the PTO-1449 has been received from the Examiner. No further action is necessary at this time with respect to the Information Disclosure Statement.

Amendments to the Drawings

The attached sheet of drawings is a replacement sheet for Fig. 8. The label "CONVENTIONAL ART" has been added to Fig. 8.

The Specification

The Examiner has objected to the specification because the phrase "We claim:" does not appear before the claims. Accordingly, the specification has been amended to include the phrase.

Claim Objections

The Examiner has made numerous objections to the claims. Accordingly, where appropriate, the claims have been amended or portions have been substantially rewritten to address the issues noted by the Examiner.

Rejection Under 35 U.S.C. § 112, First Paragraph

The Examiner has rejected claims 5, 8 and 10 under the provisions of 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement. Accordingly, the claim 5 has been substantially rewritten, and claims 8 and 10 have been canceled. It is respectfully submitted that rewritten claim 5 complies with the enablement requirement. The Examiner is respectfully requested to withdraw the rejection based upon 35 U.S.C. § 112, first paragraph.

Rejection Under 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claims 1-17 under the provisions of 35 U.S.C. § 112, second paragraph as being indefinite. Accordingly, the objectionable claim terms have been amended or deleted. It is respectfully submitted that the amended pending claims are not indefinite, and the Examiner is respectfully requested to withdraw the rejection based upon 35 U.S.C. § 112, second paragraph.

Rejection of Claims 1, 3, 9 and 11-13 Under 35 U.S.C. § 103(a)

The Office Action has rejected claims 1, 3, 9 and 11-13 under the provisions of 35 U.S.C. § 103(a) as being unpatentable over JP 61-071738 (Kenji et al., hereinafter "Kenji") in view of U.S. Patent 4,672,543 (Matsui et al., hereinafter "Matsui"). The Applicants respectfully disagree.

The Kenji patent publication describes at page 3, line 11 in the upper right column to line 9 in the lower left column, that the answer-back is transmitted after counting a predetermined time "T1", and transmission of data is enabled after counting a predetermined time "T2" which longer than "T1". Further, Kenji discloses the setting of a count value having a value between "T1" and "T2" for detecting the answer-back signal at page 2, line 11 in the lower left column to line 9 in the lower right column. Therefore, Kenji fails to disclose determining the waiting time T3 by random numbers as disclosed and claimed by the Applicants.

The Examiner asserts that packets disclosed at column 8, line 55 to column 9, line 6 in Matsui are data with a high priority. However, the Applicants believe that Matsui fails to disclosed the priority of the packets.

Accordingly, when any one of the "ACK", "RACK", "NRDY" signals, which are exemplified in Matsui as data with high priority is transmitted, the data with high priority is transmitted after the elapse of predetermined time T1, and data transmission is carried out after the elapse of T2.

On the other hand, in the present invention, first data having a high priority is transmitted before elapse of the first time, and the second data is transmitted at a random time determined by random numbers set after elapse of a first time and before elapse of a second time. Therefore, Kenji, Matsui and the combination thereof fail to teach or disclose the invention as recited in claims 1, 9 and 11.

Since the both Kenji are Matsui patents fail disclose at least one or more features of the claimed invention, it is respectfully submitted that claims 1, 3, 9 and 11-13 are patentable over the cited prior art.

Rejection of Claim 4 Under 35 U.S.C. § 103(a)

The Office Action has rejected claim 4 under the provisions of 35 U.S.C. § 103(a) as being unpatentable over JP 59-100655 (Gaishi, hereinafter "Gaishi") in view of Kenji. The Applicants respectfully traverse the rejection.

The Applicants believe that Gaishi discloses a system where a master device and slave devices are connected in a star connection. In Gaishi, the slave devices

transmit signals with delays assigned to each slave device in order to prevent collision of signals between slave devices. For instance, the slave device No. 1 has a delay of 1 bit and the slave device No. 6 has a delay of 6 bits. However, Gaishi fails to disclose that the master device relays data.

Kenji discloses, as explained above, that the answer-back is transmitted after counting a predetermined time "T1" and transmission data is enabled after counting a predetermined time "T2" which is longer than "T1". Kenji fails to disclose the feature of claim 4 of transmitting data for relaying other data before elapse of the first time and of transmitting the data to be transmitted to the transmission line at a random time determined by random numbers set after elapse of a first time and before elapse of a second time.

Accordingly, the combination of Gaishi and Kenji fail to disclose the claimed invention of claim 4. Thus the Applicants believe that claim 4 is patentable over the combination of Gaishi and Kenji.

Dependent Claims

The Applicants believe that the dependent claims are allowable over the cited prior art for at least the same reasons as the independent claims from which they depend.

Conclusion

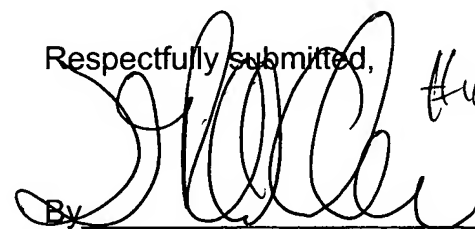

In view of the above amendments and remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Richard J. McGrath (Reg. No. 29,195) at the telephone number of (703) 205-8000, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,


By  Michael R. Cammarata
Registration No.: 39,491
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicants

Attachment: Replacement Sheet for Fig. 8

